

Easy Street, is that the right place for us?

Sheldon Peck

ABSTRACT

Easy Street is a fictional place where life is carefree. Many doctors and patients are finding simplified, less demanding treatments more appealing, especially in these infectious times that encourage approaches involving minimal contact. In orthodontics, the move to perform more clear aligner therapy may be a faulty step toward Easy Street. A case is made against further trivialization of our specialty. (*Angle Orthod.* 2021;91:138–139.)

EDITORIAL

In the hit Broadway musical “Annie,” 3 bumbling miscreants, Rooster Hannigan with his girlfriend and sister, belt out a tune called *Easy Street*, about a fictional destination where they would lead a totally carefree life. “That’s where we’re gonna be,” they sing, “Easy Street, where living’s sweet.”

Today, in orthodontics, we may be at a similar juncture. Commercial interests and social media are conditioning us to crave and accept simplified treatment solutions, often involving digitally-designed mechanisms and removable devices. Orthodontic fixed appliances attached firmly to the teeth took decades of development and testing to perfect. Now they are being displaced by removable clear thermoplastic devices, aligners, which are not better, but are less conspicuous, less complicated and less demanding. Sounds like Easy Street: a pathway with superficial features that appeal to our natural tendency to spare ourselves from work.

Furthermore, the deadly viral pandemic we are experiencing helps in promoting choices in medical therapy that require less intense patient-doctor contact, favoring contact-free approaches, regardless of associated losses in treatment efficacy or outcome stability. So, unexpectedly, COVID-19 is encouraging a move to Easy Street in medicine. In orthodontics, aligner therapy can be programmed to be almost doctor-free, we are led to believe, managed largely by the patient and the aligner manufacturer. One young orthodontist brazenly reported that she was able to start 5 new

aligner cases while she was in several weeks of quarantine at a beach house, without directly examining the patients. However, most of the doctors on this Easy Street are not orthodontists, but rather general dentists happy to develop a new source of patients and revenue.

Align Technology is the dominant corporate entity in the removable aligner field. This company is the provider of Invisalign and its associated computerized diagnostic scanning system, iTero. In its latest public reports, Align Technology claims that 80% of orthodontic problems can be solved with their clear aligner approach. The company further says to financial analysts that, so far, only 15% of that global market has been exploited.

How can this be possible: that now we can use weaker removable aligners to manage orthodontic treatments that years ago demanded very exacting appliances cemented to the teeth? Are the difficulty and complexity of orthodontic cases today the same as they were years ago? Or are orthodontic problems easier today than in earlier times? I thought these were good questions. Thus, I was prompted to start digging into the archives of our journals to find some answers.

In 1920, medicine in general, including orthodontics, was often baffling because of a paucity of scientific evidence. For example, very little was known about the actual origins of the dentofacial discrepancies that orthodontists were supposed to correct. Some of the etiologies discussed in orthodontic periodicals at the time were “internal secretions” from endocrine glands, habitual mouth-breathing, imbalanced diets and faulty calcium metabolism, and “perverse” mouth habits such as thumb sucking, lip biting and muscle dysfunction. The word “heredity” was sometimes invoked, but it would be several decades before the concept of “genetics” would be referenced.

Perhaps due to the powerful influence of Edward H. Angle, the first specialist in orthodontics, and his former

Sheldon Peck is Associate Editor, The Angle Orthodontist, Boston, MA, USA; Secretary Emeritus of the Edward H. Angle Society of Orthodontists; and Adjunct Professor of Orthodontics, The University of North Carolina at Chapel Hill, Chapel Hill, NC, USA

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students and followers, many now-false ideas persisted through the 1930s and later. For example, an adolescent with a Class II Division 1 (Angle's Classification) malocclusion would be described invariably as a mouth-breather. Also, well-trained orthodontists in the 1920s and 1930s still believed in Wolff's Law, declaring that the amount of growth of a bone like the maxilla or mandible depended on its active function. Thus, a weak mandible would be expected to grow larger and longer from an orthodontic treatment designed to provide the right forces. Furthermore, many influential specialists, especially Angle School graduates, voiced strong opposition to orthodontic tooth extractions as a treatment for dental crowding.

From my review of old journal articles, it appears that 90 to 100 years ago, orthodontic cases were harder to treat and more complex, involving more severe malocclusions. As a result of tooth decay in the era before fluoridation, orthodontic treatment was routinely complicated with active caries and previously extracted teeth, a "mutilated" dentition as this status was called. Hidden problems persisted due to the less frequent use of radiography at the time. Patients felt a psychosocial stigma in wearing orthodontic braces which were more metallic and less familiar than those worn today.

Many of the published articles of that period were about principles of orthodontic diagnosis, prognosis and treatment. In those early days, leading orthodontists were struggling to sort out diagnostic methods, such as the orbital plane theory, Pont's index, cues to optimum treatment timing, and anthropometrics. Diagnostic cephalometrics was not introduced until the 1930s. Reports of cases were of severe occurrences; Angle Class II Division 1 cases all demonstrated extreme overjet and overbite, often with palatal constriction. In some reports, treatments for patients with similar conditions were compared, such as delayed eruption of teeth, or multiple losses of deciduous teeth, or presence of impacted teeth. Attempts at biological scientific studies involved several papers on such subjects as calcium to phosphorus ratios, the biology of apical root resorption, bone changes during tooth movement, maxillary sinus anatomy, and odontologic studies of twins. Regarding treatment modes, some articles discussed design principles for orthodontic appliances and complained about the trend of commercial laboratories to usurp the task of designing orthodontic appliances. And there was an occasional, enlightening account on the history of the young specialty of orthodontics.¹

Now orthodontics is easier, for both patient and doctor. Treatment appliances are commonplace in society, even among adults, and they come in many varieties. Many solutions are simpler, designed for camouflage, not corrections.

Comparing past treatments with present ones, it is plain to see that clinical orthodontists today are indeed on Easy Street. The specialty of orthodontics has gotten soft, judging from the milder spectrum of problems being treated, the cosmetic emphasis of patients and private practice, and the proliferation of removable treatment appliances promoted by industry and embraced by doctors. The truth is that technology will surely not save us from these trends. Telemedicine and video consultations are not our recourse for more rigorous standards of patient practice. These modes are fine for a scientific conference, but not for a patient examination, consultation, diagnosis and treatment planning.

The same trivialization is taking place in other medical disciplines such as dermatology and ophthalmology. It has been cogently argued that dentistry (and its specialties) should integrate back into mainstream medicine, its origin, as a bona fide medical specialty.^{2,3} In this regrouping, orthodontics would be a subspecialty of oral medicine. It would strive to become robust again medically, to carve out a modernized specialty scope that would include dentofacial diagnostic conundrums, genetic molecular aspects, implant-borne fixed devices, cleft repair, interrelations with other head and neck specialties and regular team membership for craniofacial rehabilitations.

I believe orthodontic specialists should demand something more for our professional lives than Easy Street. We owe it to ourselves, our academic background, and our historical roots in medicine. Let's leave aligner treatments, which for the most part are camouflage or cosmetic interventions, to supervised dental therapists who could evolve from present-day dental hygienists.

REFERENCES

1. Summa R. Thirty years in orthodontia, looking backward, forward, and sideways. *Internat J Orthodontia Oral Surg Radiogr.* 1930;16:725–736.
2. Peck S. Redesigning dentistry — a perspective based in history. *J Hist Dent.* 2020;68:2–7.
3. Giddon DB, Assael LA. Should dentists become 'oral physicians'? Yes, dentists should become 'oral physicians.' *J Am Dent Assoc.* 2004;135:438–447, 449.